

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6: WO 99/25148 (11) International Publication Number: **A3** H04L 12/56, H04Q 11/04 (43) International Publication Date: 20 May 1999 (20.05.99)

(21) International Application Number:

PCT/NO98/00298

(22) International Filing Date:

5 October 1998 (05.10.98)

(30) Priority Data:

19975152

10 November 1997 (10.11.97) NO

(71) Applicant (for all designated States except US): TELEFONAK-TIEBOLAGET LM ERICSSON [SE/SE]; S-126 25 Stockholm (SE).

(72) Inventor; and

- (75) Inventor/Applicant (for US only): CORNELIUSSEN, Knut, Snorre, Bach [NO/NO]; Hegdehaugsveien 35, N-0352 Oslo
- (74) Agent: OSLO PATENTKONTOR AS; Postboks 7007 M, N-0306 Oslo (NO).

(81) Designated States: AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN. MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

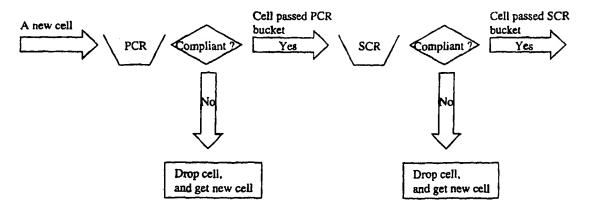
Published

With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(88) Date of publication of the international search report: 15 July 1999 (15.07.99)

(54) Title: METHOD FOR CONTROLLING THE TRAFFIC IN AN ATM NETWORK SO AS TO MAINTAIN THE QUALITY OF SERVICE



(57) Abstract

The present invention relates to a method for controlling the traffic in an ATM (Asynchronous Transfer Mode) network so as to maintain the Quality of Service (QoS) thereof by implementing Usage Parameter Control (UPC) comprising at least one leaky bucket unit arranged between an original cell flow of ATM-cells and a switch unit, there being used one counter for each bucket per connection, said counters being incremented and decremented according to predetermined criteria by means of timer counter means, and for the objective of providing a method which can be implemented in a far more time consuming and hardware requiring implementation it is according to the invention suggested a method characterized by the combination of the following steps: decrementing the bucket counters at regular intervals but only when there are no arriving cells, and computing real bucket values for a connection when a cell for said connection arrives.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovenia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	•	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	Madagascar The former Yugoslav	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	MIK	•	TR	
BG	Bulgaria	HU	Hungary	ML	Republic of Macedonia Mali	TT	Turkey
BJ	Benin	IE	Treland	MN		UA	Trinidad and Tobago Ukraine
BR	Brazil	IL	Israel		Mongolia		
				MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	zw	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's	NZ	New Zealand		
CM	Сатегоол		Republic of Korea	PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		